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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,725	07/24/2003	Kazutaka Hattori	VX032541	8054
21369	7590	02/15/2006	EXAMINER	
POSZ LAW GROUP, PLC 12040 SOUTH LAKES DR. SUITE 101 RESTON, VA 20191			ALI, HYDER	
			ART UNIT	PAPER NUMBER
			3747	
DATE MAILED: 02/15/2006				

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/625,725	<b>Applicant(s)</b> HATTORI ET AL.	
	<b>Examiner</b> HYDER ALI	<b>Art Unit</b> 3747	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 05 July 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 5,6 and 9 is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 7 and 8 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)                     |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)               | Paper No(s)/Mail Date. _____  |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>7/5/05</u> .  | 6) <input type="checkbox"/> Other: _____                                    |

## DETAILED ACTION

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**1. Claims 1 and 3 are rejected under 35 U.S.C. 102(b) as being anticipated by Imamichi et al (JP-11-030164).**

As to Claim 1, **Imamichi et al** discloses a fuel injection system for a diesel engine, comprising a fuel injection nozzle 21 adapted to inject a fuel toward the interior of a combustion chamber of the diesel engine, an inert material supply passage 6d from which an inert material with respect to the fuel is supplied, and a fuel passage 6c communicating with the inert material supply passage, and adapted to pass the fuel injected from the fuel injection nozzle therethrough, wherein the fuel from the fuel injection nozzle is injected toward an inert material supplied from the inert material supply passage 6d.

As to Claim 3, **Imamichi et al** discloses a fuel injection system for a diesel engine comprising a fuel injection nozzle 21 adapted to inject a fuel toward the interior of a combustion chamber of the diesel engine, an inert material supply passage 6d from which an inert material with respect to the fuel is supplied, and a fuel passage 6c communicating with the inert material supply passage 6d, and adapted to pass the fuel injected from the fuel injection nozzle therethrough, wherein the inert material supply

passage 6d is communicating with the fuel passage 6c in a position offset from a center of cross sections of the fuel passage 6c, and wherein the fuel from the fuel injection nozzle 21 is injected toward the inert material supplied from the inert material supply passage 6d.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**2. Claims 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Imamichi et al (JP-11-030164) in view of Document (JP-2668026).**

**Imamichi et al** discloses the limitations of independent claims 1 and 3 as cited above.

**Imamichi et al** does not disclose a controller controlling a quantity of the inert material supplied from the inert material supply passage.

**Document (JP-2668026)** discloses a controller 90 controlling a quantity of the inert material supplied from the inert material supply passage 30.

It would have been obvious to a person having ordinary skill in the art to modify

**Imamichi et al** by employing a controller 90 controlling a quantity of the inert material supplied from the inert material supply passage 30 as taught by **Document (JP-2668026)** in order to provide **Imamichi et al** engine with a controller controlling a quantity of the inert material supplied from the inert material supply passage.

***Allowable Subject Matter***

Claims 5,6,9 are allowed.

Claims 7 and 8 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

Applicant's arguments with respect to claims 1-9 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to HYDER ALI whose telephone number is (571) 272-4836. The examiner can normally be reached on M-F (8:30-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, HENRY YUEN can be reached on (571) 272-4856. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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Henry C. Yuen  
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